

## The Philadelphia Transit Plan Summary A Vision for 2045



February 2021

To view full plan, visit phila.gov/documents/philadelphia-transit-plan



## EXECUTIVE SUMMARY

**The Philadelphia Transit Plan** is the City's guide for improving public transit. Philadelphia needs public transit - it connects residents to opportunity, supports our economy, and is critical to fighting climate change.

While our city has one of the most robust transit systems in the country, we need new policies, planning approaches, and investment.

We cannot fully address the systemic racial disparities among our residents, recover from the current economic and health crises, and fight the climate crisis without investing in public transportation.

By focusing on a **Policy Platform**, **Bus Corridors**, and **High Capacity Transit**, this plan sets out **a vision of**:

## A CITY CONNECTED BY TRANSIT

This vision describes where we want to go, and the mission drives the policy and investment that gets us there. To achieve the vision, it must be **our mission to:** 

CREATE A MORE EQUITABLE, SAFE, ACCESSIBLE, COMFORTABLE, AFFORDABLE, AND SUSTAINABLE TRANSIT SYSTEM TO CONNECT A RECOVERED, REIMAGINED PHILADELPHIA

## **GOALS & STRATEGIES**

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#### TRANSIT FOR SAFETY, RELIABILITY, AND CLEANLINESS

- Prioritize buses on our streets by adding bus lanes and other features to speed up service and eliminate delay.
- Enhance cleanliness and safety on transit vehicles, at transit stops, and at transit stations, building on progress made during the COVID-19 pandemic.
- Improve bus stop infrastructure, such as shelters and lighting.

#### TRANSIT FOR THE ENVIRONMENT

- Shift trips from driving to public transit, and make living without a car easier for Philadelphia residents.
- Adopt battery electric buses as the technology allows.
- Shift toward clean energy to power our trains, buses, and trolleys.

#### **TRANSIT FOR AN EQUITABLE & JUST PHILADELPHIA**

- Reform the fare structure, including adding a low-income pass program and instituting fare capping.
- Expand frequent weekend service.
- Ensure an equitable approach to the SEPTA bus network redesign.
- Achieve full accessibility on the MFL, BSL, and trolley network.

#### TRANSIT FOR TODAY'S CHALLENGES

- Implement trolley modernization and the bus priority network.
- Partner with SEPTA on its bus network redesign to ensure the network better addresses the needs of the city's diverse residents.
- Support post-pandemic economic recovery with transit investments.
- Ensure every step of the transit riding process is built around the user's needs.

#### TRANSIT FOR THE FUTURE

- Reimagine our Regional Rail system as a frequent, metro-style service that is integrated with the entire transit network.
- Work with regional partners to establish a stable source of transit funding.
- Expand the high capacity transit network to respond to changing needs of the city and region.
- Coordinate land use planning and transit investment to ensure they both support one another.



## WHY TRANSIT MATTERS

### Transit Improves Equity

- Investing in better transit service is an important tool for the City to bridge the opportunity gap between residents. Residents of color spend an average of 12 minutes per day longer than White residents getting to and from work – 50 hours over the course of a year for someone working five days per week.<sup>1</sup>
- Inequities in health outcomes challenge Philadelphia and exacerbate other issues. Transit is a tool in addressing this. Transit riders are less likely to become obese and get more activity than people driving.<sup>2, 3</sup> Reducing reliance on cars also allows for more space for healthier infrastructure such as bike-share, parklets and outdoor dining, and green-stormwater infrastructure.

#### Transit Makes Philadelphia Competitive and Will Help Us Recover

- Philadelphia benefits from one of the largest transit networks in the country. A robust transit network is key to the city's competitiveness in attracting and retaining people and investment.
- Investing in public transit has been proven to create jobs, reduce congestion, and attract companies and jobs to the city and region.

### Transit Is Critical to Tackling Climate Change

• To rise to the challenge of our climate crisis, every possible trip in the city must shift to public transit, walking, or biking. Public transit emits significantly less carbon than private vehicles, and SEPTA is working towards fully electrifying its fleet and sustainably sourcing its electricity.

<sup>1</sup> Average travel time to work (minutes) by race/ethnicity, all modes; National Equity Atlas (2017)

<sup>2</sup> She, et. al. "Is promoting public transit an effective intervention for obesity?: A longitudinal study of the relation between public transit usage and obesity." Transportation Research (2019)

<sup>3</sup> Mayor of London, "Mayor's Transport Strategy" (March 2018)



#### **Engagement and Outreach Summary**

Each section of **The Philadelphia Transit Plan** features these green callout boxes that describe the relevant engagement results for that section. The engagement for this plan is ongoing and living. Every one of the recommendations that follow will need to be developed with public conversation and outreach.

## While specific insights are throughout the plan, here are the most common responses we heard:

- 1. Accessibility
  - Lack of elevator access at Broad Street Line and Market Frankford Line stations
  - Crowding or lack of dedicated space on buses
  - No access to trolleys for people with limited mobility
- 2. Affordability
  - Transfer penalty
  - Cost of group travel
  - Weekly transpass not effective

- 3. Communications
  - SEPTA Key confusion
  - Updates on service changes
  - Reaching those without cellphones
- 4. Reliability
  - Missing a transfer, a slow ride, etc. means losing access to opportunities and resources
- 5. Safety and Cleanliness
  - People feel unsafe at some stops bus shelters and lighting help
  - Facility cleaning is critical to passenger comfort

# POLICY PLATFORM KEY TAKEAWAYS

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The Policy Platform is critical to shaping the environment in which transit exists and focuses on the following key topics: Universal Design and User Experience, Open and Equitable Fares, Frequent and Connected Service, Transit for the Environment, and Integrated Transit and Land Use Planning. The following are key takeaways from these topics in Chapter 2.

## FULL ACCESSIBILITY (CHAPTER 2.1)

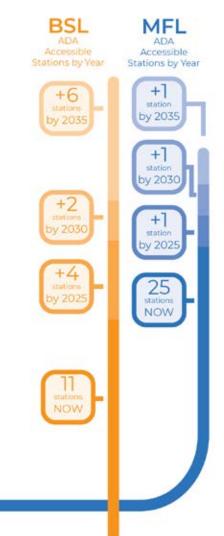
Today, over 70 percent of SEPTA subway and elevated stations are ADA compliant. The City and SEPTA have worked to prioritize MFL and BSL stations for ADA-compliant elevator construction, but this work will likely not be complete until 2035 at the earliest and is constrained by SEPTA's funding environment. **Our goal is to work with SEPTA to achieve full MFL and BSL accessibility by 2030.** 

## LOW-INCOME FARE PASS (CHAPTER 2.2)

All Philadelphians should have access to high-quality, affordable public transit. Our goal is to work with SEPTA to create a fare structure that is equitable, sustaining, and fair. To meet this goal, the City and SEPTA must work together to develop a comprehensive plan for equitable fare policy, including working with state and regional stakeholders to identify funding for **a low-income fare program similar to the senior fare program.** 

#### Our goal is to accelerate FULL ACCESSIBILITY

on the MFL and BSL from the current timeline below to **2030** 



## FREQUENT WEEKEND SERVICE (CHAPTER 2.3)

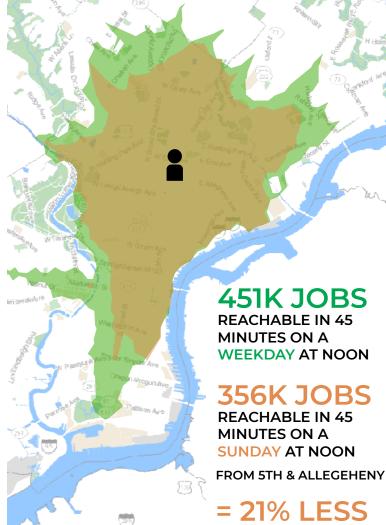
Frequency is freedom. Being able to count on a bus showing up within a few minutes of arriving at the stop means being able to rely on that bus for most of your travel. Many Philadelphians, particularly those that need transit the most, work in jobs that require them to travel on the evening and weekends. The City will work with SEPTA and their Comprehensive Bus Network Redesign project to increase bus frequency on the weekend to improve access to opportunity for hundreds of thousands of Philadelphians.

## BATTERY ELECTRIC BUS FLEET (CHAPTER 2.4)

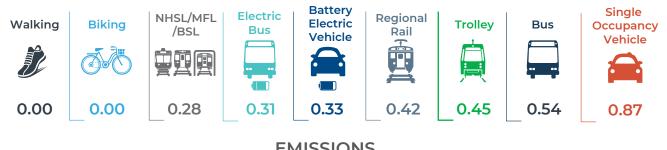
Our top priority for reducing our carbon emissions from transit is to shift as many trips as possible from automobiles to walking, biking, and transit. Over time, we also need to fully shift transit to zero-emission energy sources. Today, the technology is not quite ready to fully implement battery electric buses across SEPTA's entire network. Testing of this technology has seen mixed results. To successfully transition to zero-emission technology, we recommend that SEPTA develop a battery electric bus master plan to guide the agency over the coming decades to fully transition in the next twenty years.

#### The Lack of Frequent Weekend Service REDUCES ACCESS TO JOBS

for Philadelphia Residents



JOBS ACCESSIBLE ON SUNDAY



#### Transit, Walking, and Biking Reduce Our Carbon Emissions

## BUS CORRIDORS KEY TAKEAWAYS



## **PRIORITIZATION (CHAPTER 3.1)**

To accelerate Philadelphia's progress towards improving bus service, the City has identified priority corridors for improvements. **Priority corridors for bus improvements were selected based on pre-COVID ridership numbers, number of low-income riders, and bus speed/reliability.** The map on the right highlights the first two tiers of priority corridors that could receive improvements like bus lanes, boarding islands, or transit priority signals.

## TOOLKIT (CHAPTER 3.2)

To make buses run better on our streets, we have developed a toolkit of approaches, gathered from across North America. The toolkit provides design strategies that can be used to adapt streets for bus priority, including both quick-build design techniques to redesign streets now and ideas for transformative capital projects. The toolkit will help the City, SEPTA, and partner agencies engage neighbors and riders, identify problems, weigh trade-offs, and select design treatments that improve bus service.







Bus Shelter | Cecil B. Moore Avenue, Philadelphia



Transit Boarding Island | Dexter AVE, Seattle

### Priority Corridors

## Tier 1 corridors for near-term implementation:

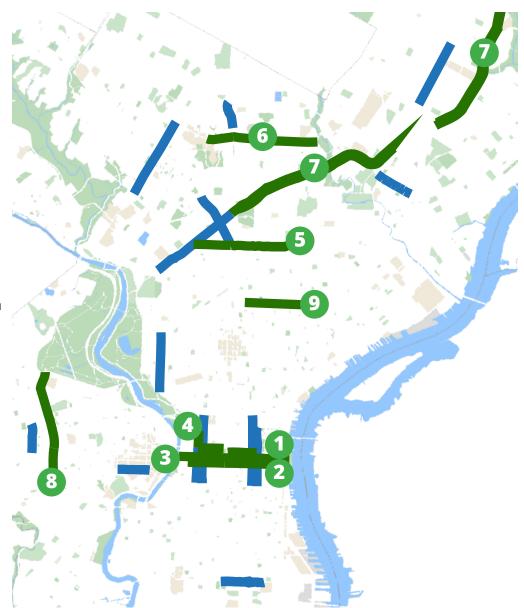
- 1. East Market Street
- 2. Chestnut St / Walnut St
- 3. Market Street & JFK Boulevard
- 4. 20th Street
- 5. Erie Avenue
- 6. Olney Avenue
- 7. Roosevelt Boulevard
- 8. 52nd Street
- 9. Lehigh Avenue

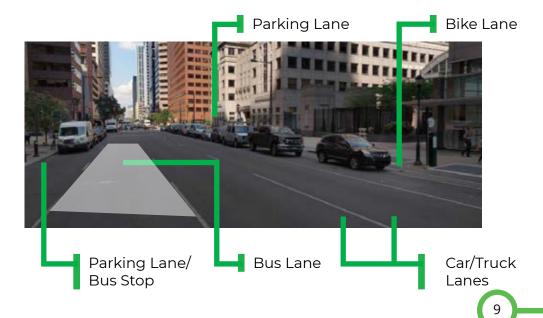
## Tier 2 corridors for longer-term implementation:

- 10. 19th Street
- 11. 7th/8th Street
- 12. Spruce Street (40th - 33rd)
- 13. 56th Street
- 14. 29th Street
- 15. Germantown Avenue
- 16. Chelten Avenue
- 17. Arrott Street
- 18. Old York Road
- 19. Oregon Avenue
- 20. Castor Avenue
- 21. Hunting Park Avenue

### JFK & MARKET

To build on the Vision Zero complete streets project completed in 2018, the City and SEPTA will work to implement bus lanes on Market Street and JFK Boulevard between 20th and 15th Street. These lanes would be done with white paint "bus only" markings and implemented quickly, as they do not eliminate parking.





# HIGH CAPACITY TRANSIT KEY TAKEAWAYS

### MODERNIZED TROLLEY NETWORK (CHAPTER 4.1)

**Trolley Modernization is the City's top priority for large transit infrastructure spending.** The existing trolley fleet needs to be replaced due to its age, which creates an opportunity for SEPTA to transition to a fully accessible, more spacious, and comfortable trolley fleet. Infrastructure improvements such as ADA accessible stations, updated signals, and transit priority treatments will make the network safer, more reliable, and faster.

The City will work with SEPTA to secure funding for trolley modernization and will collaborate on the design and placement of modern trolley stations in the street.

#### **Trolley Modernization Funding Needs**

\$1 billion \$430 million \$420 million

To acquire state-of-the-art vehicles, which feature more than twice the existing vehicle capacity and an expected 40-year lifespan<sup>1</sup>

For system-wide ADA infrastructure improvements, including elevators in stations and on-street platforms

For new maintenance facility to accommodate new vehicles<sup>2</sup>

\$1.85 billion

or \$1.90 per trip over the project's expected 40-year lifespan<sup>2</sup>

<sup>1</sup> All estimates reflect 2020 dollars.

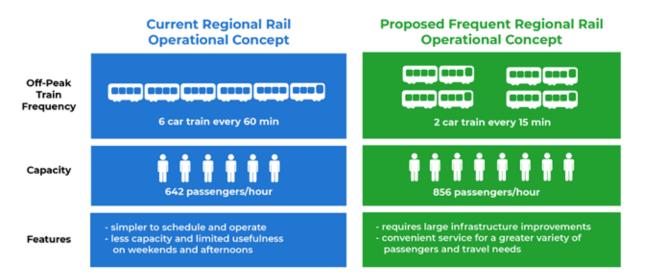
<sup>2</sup> Based on annualized 2020 dollar estimate and 2019 ridership.



#### Rendering of Modern Trolley Station (DVRPC Modern Trolley Station Design Guide)

## FREQUENT REGIONAL RAIL (CHAPTER 4.2)

To truly become a City Connected by Transit, we must reimagine Regional Rail as frequent, all-day service that matches the future of work and ridership trends likely in a post-COVID world. This model departs from the heavily peaked service focused on the suburb to downtown work trip that has characterized commuter rail for over a century. A three phase vision is discussed, starting with a proposal for a new "Silver Line", as well as an overview of the significant barriers to frequent, all-day service.

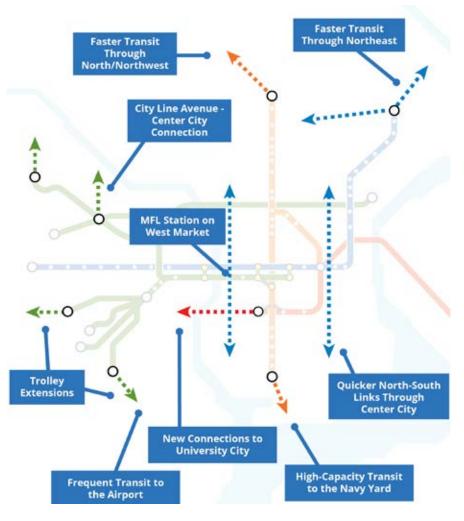


### HIGH CAPACITY TRANSIT EXPANSION (CHAPTER 4.3)

While Philadelphia's buses move the majority of our transit trips, our high capacity transit system is the backbone of the network, that rapidly moves people across the city and region. While much of this plan for high capacity transit is focused on modernizing the trolley network and reimagining Regional Rail, we see the need to begin planning for expansion to help us meet our vision over the next twenty-five years.

Based on an analysis of previous planning efforts and key mobility gaps, we recommend the following projects in the city for advancement:

- 1. Roosevelt Boulevard Bus Rapid Transit
- 2. PATCO Extension to University City
- 3. New MFL Station on West Market
- 4. Eastwick Trolley Extension and Transit Center
- 5. Navy Yard Transit



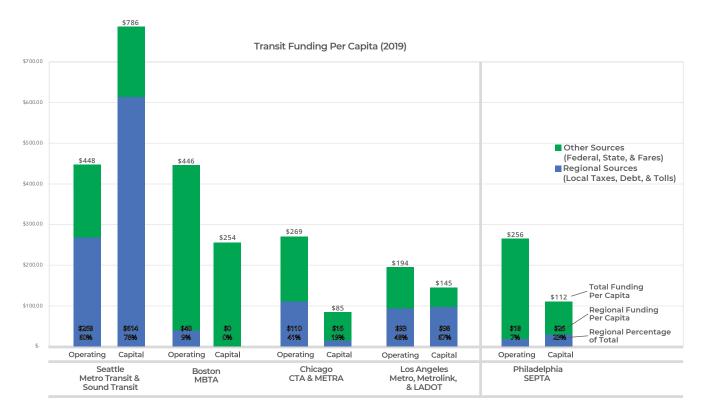
IMPLEMENTATION KEY TAKEAWAYS

The largest challenge for implementation will be balancing the many ideas to improve transit and adequately funding this work. Even with the new Biden administration's commitment to infrastructure, equity, and climate, this plan will still be implemented in a constrained funding environment.

While significant engagement went into developing these ideas, this is not the end of the conversation. In fact, it's only the beginning. **We have to work together to build a transit system that connects Philadelphia.** 

## **REGIONAL FUNDING SOLUTIONS**

**To achieve the vision of this plan – a City Connected by Transit – funding will be a critical challenge to overcome.** Without solving the pending state funding gap, SEPTA will be unable to meet current maintenance needs, let alone make any improvements. Solving the funding problem will require solutions at the Federal, State, and regional level.



## FUNDING SCENARIOS

Because of the uncertainty in funding at all levels, we present several scenarios for capital investment in City-owned and sponsored projects:

- A low scenario is based on an extrapolation of the City's capital budget trends over previous years, the City's transit shelter contract, and our matching contribution to SEPTA's capital program. These amounts are subject to annual appropriations through the City's capital budget process.
- A moderate scenario assumes additional State and Federal dollars.
- An aspirational scenario assumes a dramatic increase in funding programs for street improvements that prioritize transit. This would require a sea change in budget and policy at the Federal, State, or regional level.

	Low	Moderate	Aspirational
Total Bus Shelters	600 Shelters (335 additional)	600 Shelters (335 additional)	750 Shelters (485 additional)
Priority Corridors	5 corridors	10 corridors	12 corridors
Total	\$45 million	\$75 million	\$95 million

#### Potential Six-Year Funding Scenarios

## MEASURING IMPLEMENTATION

These metrics measure the progress towards our vision - a City Connected by Transit. All metrics are set with a horizon of 2025, with the exception of network accessibility, which has a horizon of 2030.

Theme	Measure	
Increase ridership	Increase transit ridership in Philadelphia by 10% vs. the national trend	
Access to jobs	Increase the number of jobs accessible by transit within 30 minutes at noon by 10%	
Equitable inclusion	Increase the number of jobs accessible by transit within 30 minutes at noon for the average non-white residents by 15%	
Access to frequent transit	Increase the number of residents living within 0.25 miles of frequent transit by 10%	
Passenger experience	Increase the number of riders in the city served by bus shelters from 32% to 40%.	
Transit speeds	Increase average bus speeds by 10%	
Network accessibility	Achieve full accessibility on the Market Frankford and Broad Street Lines	

